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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,694	12/22/2003	James P. Kleckner	P01091US2A	7802
7590 08/11/2006			EXAMINER	
Michael R. Huber Bridgestone Americas Holding, Inc. 1200 Firestone Parkway Akron, OH 44317			MAKI, STEVEN D	
			ART UNIT	PAPER NUMBER
			1733	

DATE MAILED: 08/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/743,694

Applicant(s)

KLECKNER, JAMES P.

Examiner

Steven D. Maki

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9,12-16 and 19-29 is/are pending in the application.
- 4a) Of the above claim(s) 28 and 29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9,12-16 and 19-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1) A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7-10-06 has been entered.

2) Newly submitted claims 28-29 are directed to an invention (method) that is independent or distinct from the invention originally claimed (tire) for the following reasons:

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 9, 12-16 and 19-27, drawn to originally claimed and elected tire having a tag disposed in cavity of sidewall, classified in class 152, subclass 152.1.
- II. New claims 28 and 29, drawn to a method for mounting a tag in the sidewall of a tire, classified in class 264, subclass 272.11.

The inventions are independent or distinct, each from the other because: Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make another and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the product as claimed can be made by another and materially different process such as positioning an encapsulated tag in a cavity of an uncured sidewall of a tire and then vulcanizing the tire such that the encapsulation material adheres to the sidewall to secure the tag to the sidewall.

Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.

Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

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Since applicant has received an action on the merits for the originally presented invention (tire), this invention has been constructively elected by original presentation for prosecution on the merits. It is noted that the originally presented invention was drawn to a tire wherein the tire has a tag carried by a reinforcing belt or a tire having a tag disposed in a cavity of the sidewall. See original claims 1-16 and 18. It is also noted that applicant elected species #2 (tire having tag disposed in cavity of sidewall). See page 2 of office action dated 9-27-05. Accordingly, claims 28 and 29 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

3) Applicant is advised that should claim 9 be found allowable, claim 27 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claims 9 and 27 have the same scope. The description of "the encapsulation material was adhered to the sidewall after the sidewall was previous cured" in claim 27 fails to require a difference in scope between claims 9 and 27. In other words, the sequence of steps in the above noted product by process language of claim 27 fails to change the scope of "adhering" in claim 9.

4) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Japan 325

6) **Claims 9, 12-13, 15-16, 19-22, 24-25 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Japan 325 (JP 2001-63325).**

Japan 325 discloses a tire having a tread 1, belt 2, carcass 4, bead wires 5, bead part 8, side tread 3, recess 8a and transponder 7 having receiver and transmitter functions wherein transponder ("tag") is disposed in the recess 8a ("cavity"). See translation and figure 1. The distance A between the center of the transponder 7 and the rim flange is up to 100 mm (3.93 inches). See page 9 of translation and figure 6. As can be seen from figure 1, recess 8a is shown as having "an opening at the outer surface of the sidewall". It is noted that Japan 325 describes holding the transponder "by the side tread rubber [sidewall rubber]". See page 8 of translation. The claimed tire is anticipated by Japan 325's tire. The claimed cavity reads on the recess 8a. The claimed tag reads on the transponder. The claimed bead portion reads on the portion including bead wire 5. The description of "at the outer surface of the sidewall" fails to require a location different from that disclosed by Japan 325. It is emphasized that the center of Japan 325's transponder may be 100 mm (3.9 inches) above the rim flange.

With respect to "the encapsulation material adhering to the sidewall to secure the tag to the sidewall" (claim 9), the epoxy material disclosed by Japan 325 inherently adheres to the rubber after the rubber of the sidewall is vulcanized.

With respect to "the encapsulation material having been applied to the sidewall after the sidewall was previously cured" (claim 19), the epoxy material disclosed by Japan 325 inherently adheres to the rubber after the rubber of the sidewall is vulcanized.

As to claims 12-13, Japan 325 teaches coating the transponder with epoxy resin. See for example page 13 of translation. The claimed encapsulation material reads on the epoxy resin.

As to claims 15-16, see location of transponder / recess shown in figure 6 and described on page 9 of the translation.

As to claims 19-22, 24-25 and 27, note above comments on claims 9, 12-13 and 15-16.

Japan 325 with Adamson et al (filed 6-11-02, available under 102(e))

7) Claims 9, 12-16 and 19-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 325 in view of Adamson et al (WO 03/105509, filed 6-11-02).

Japan 325 is considered to anticipate claims 9 and 19. In any event: It would have been obvious to one of ordinary skill in the art to encapsulate Japan 325's tag for a tire with encapsulation material as claimed such that the encapsulation material *adheres* to the sidewall to secure the tag to the sidewall in view of Adamson et al's suggestion to

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surround a "tag" for a tire comprising an antenna 20 and a radio device 11 with an insulation coating 22, which has *good adherence* with the rubber material of the tire, to allow for very high frequency or higher radio transmission from the antenna to thereby improve the read range of the "tag".

In claim 9, "the encapsulation material adhering to the sidewall to secure the tag to the sidewall" fails to require adherence different from that suggested by Japan 325 and Adamson et al.

As to claim 19, "the encapsulation material having been applied to the sidewall after the sidewall was previously cured" fails to require adherence different from that suggested by Japan 325 and Adamson et al. In particular, this product by process language fails to require a materially different product than that suggested by the applied prior art to Japan 325 and Adamson et al. See MPEP 2113.

As to claims 12-14 and 21-23 (claimed specific encapsulation material), see page 6 of Adamson et al.

As to claims 15-16, 20 and 24-25 (claimed tag location), see figures 1 and 6 of Japan 325.

As to claim 26, Adamson et al suggest a "tag" comprising a central body with wires extending from both sides of the central body. See figure 1.

Japan 325 with Lee et al / Spitz et al / Rensel

8) Claims 9, 12-16 and 19-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 325 in view of at least one of Lee et al (US 5731754), Spitz et al (EP 694861) and Rensel (EP 1049196).

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Japan 325 is considered to anticipate claims 9 and 19. In any event: It would have been obvious to one of ordinary skill in the art to *encapsulate* Japan 325's tag for a tire with encapsulation material as claimed such that the encapsulation material *adheres* to the sidewall to secure the tag to the sidewall in view of the suggestion from at least one of Lee et al, Spitz et al and Rensel et al to encapsulate a tag for a tire in order to protect the tag wherein

(a) Lee et al suggests disposing a transponder for a tire in encapsulating medium 7 such as rubber (a flexible material) for compatibility with a vehicle tire (col. 2 lines 45-65),

(b) Spitz et al suggests disposing a transponder for a tire in a container 2 comprising rubber or high elastic plastic to protect the transponder from the outside particularly against mechanical effect and adhering the container to the tire (see machine translation), and

(c) Rensel et al suggests encapsulating components of a device for transmitting information with rigid epoxy resin to provide protection for the components of the device (col. 5 lines 30-37).

The encapsulation material adhering to the sidewall naturally flows from Japan 325's teaching to cure the sidewall rubber adjacent to the transponder. None of the pending claims require the tag to be held only by adhesion. None of the claims require the steps of forming a cured tire having a cavity and then placing the transponder in the cavity and adhering the transponder to the sidewall rubber. It is also noted that claims 9 and 19 fail to exclude "adhering" using an adhesive such as adhesive 5 disclosed by

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Spitz et al. As to claim 19, "the encapsulation material having been applied to the sidewall after the sidewall was previously cured" fails to require adherence different from that suggested by the above applied prior art. In particular, this product by process language fails to require a materially different product than that suggested by the applied prior art. See MPEP 2113.

As to the claimed location of the transponder, see figures 1 and 6 of Japan 325. As to the specific encapsulation material, Lee et al suggests using rubber (flexible material), Spitz et al suggests using elastic rubber / plastic and Rensel et al suggests epoxy. As to claim 26, Rensel et al suggest a "tag" comprising a central body with wires extending from both sides of the central body. See figure 3.

Remarks

9) Applicant's arguments filed 7-10-06 have been fully considered but they are not persuasive.

Applicant argues that the language in claims 9 and 19 requires the adhesion force to be created by the application of the encapsulation material to the sidewall. In response, examiner comments that product by process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps. See MPEP 2113. Claims 9 and 19 fail to require "adherence" different from that obtained by vulcanizing rubber adjacent cured encapsulation material as suggested by the applied prior art.

Applicant argues that the encapsulation material of Japan 325 does not adhere the tag to the sidewall of the tire as recited in claims 9 and 19 because it is already

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cured before ever contacting the material of the sidewall. This argument is not persuasive since the rubber of the sidewall is uncured before ever contacting the material of the tag.

Applicant comments that Japan 325's transponder is fully exposed to the heat of the tire vulcanization process. Claims 9 and 19 fail to exclude exposing the claimed tag to heat equivalent to the heat of the tire vulcanization process. Furthermore, no unexpected results over Japan 325 have been shown.

With respect to Adamson et al, applicant argues that the cured encapsulation material of this reference does not adhere the tag to the sidewall as recited in the claims. This argument is not persuasive since Adamson et al teaches selecting coating material (encapsulating material) such as "butadiene rubber" and "epoxy" such that good adherence with the rubber of the tire is obtained. See first full paragraph on page 6 of Adamson et al. The adherence obtained by curing *an assembly of uncured material - cured material* (uncured sidewall - cured encapsulating material) is not seen as being different from curing *an assembly of cured material - uncured material* (cured sidewall - uncured encapsulating material). This is especially true when rubber is used for the encapsulating material and the sidewall - "butadiene rubber" being one of the coating materials (encapsulating materials) disclosed by Adamson et al.

With respect to the other cited references, applicant argues that the cured encapsulation material of those references does not adhere the tag to the sidewall as recited in the claims. This argument is not persuasive. First: Lee et al and Rensel clearly suggest "encapsulating" a tag with rubber and epoxy respectively. Second:

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Claims 9 and 19 fail to exclude obtaining adherence using a separate adhesive as in Spitz et al. Third: Adherence between the sidewall and encapsulating material is obtained in Japan 325's process since the rubber of the sidewall is cured adjacent to the encapsulating material.

10) No claim is allowed.

11) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Maki whose telephone number is (571) 272-1221. The examiner can normally be reached on Mon. - Fri. 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Steven D. Maki
August 8, 2006


STEVEN D. MAKI 8-8-06
PRIMARY EXAMINER